What Does It Mean to Immunize a Bond Portfolio?

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Bond immunization is a strategy used to reduce interest rate risk in a bond portfolio. As in medicine, the use of the word immunization refers to reducing risks through preventative action. Bonds are typically stable from day to day, but they are exposed to interest rate risk. Without immunization, rising interest rates send bond values down. Bond immunization can reduce the price sensitivity of a bond portfolio to rising interest rates. Institutional investors can immunize portfolios using credit derivatives.

Interest Rate Risk

Bonds fluctuate in price as interest rates change. This exposure is commonly referred to as interest rate risk, and it is a consequence of unrealized losses suffered by the bond owner. If interest rates go up because of inflation, a bond’s price drop would correspond to how its future payments will be able to buy less. If interest rates rise with steady or declining inflation, the drop in the bond price will correspond to the opportunity cost of investing in a bond while more attractive bond prices become available.

Sensitivity

You adjust the duration of a portfolio to match your investment horizon. Duration, expressed as a number of years, is a multiple that approximates individual bond or bond portfolio sensitivity to interest rate changes. A bond with a duration of four will see a decline in value that is roughly four times the increase in interest rates. For example, a 0.5 percent increase in interest rates would cause a bond with a duration of four to drop in value about 2 percent, or four times 0.5 percent.

Immunization Goals

There are different goals that can you can safeguard by immunizing a bond portfolio. Net worth immunization has the goal of reducing fluctuations in a bond portfolio's market value. On the other hand, target date immunization has the goal of meeting promised payments on time. When you immunize your bond portfolio, you lock in a fixed rate of return during the span of the your investment horizon. In this case, you are "immune" from changes in interest rates and receive that specified rate of return. This strategy is specially appropriate when you need to fund a liability in the future.

Cash-Flow Matching

Cash-flow matching is simple way to reduce exposure to interest rate change. This strategy is mainly used in the pension and insurance industry, though it can be adopted by individual investors. Basically, you match the scheduled cash payments of bonds to known, fixed payments, such as fixed-rate mortgage payments. The objective is to be able to have the right amount of cash inflow at the time you need to pay a future liability. Cash-flow matching is also known as dedication.

SOURCE: http://finance.zacks.com/mean-immunize-bond-portfolio-10154.html